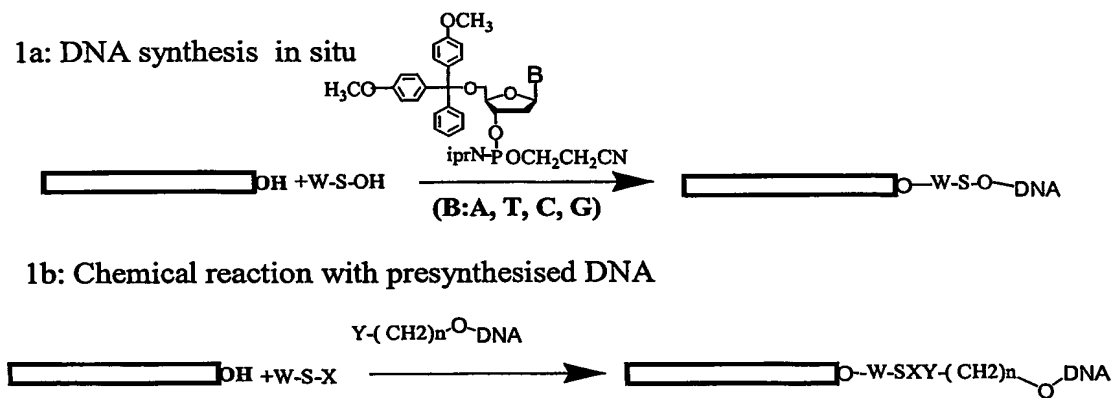


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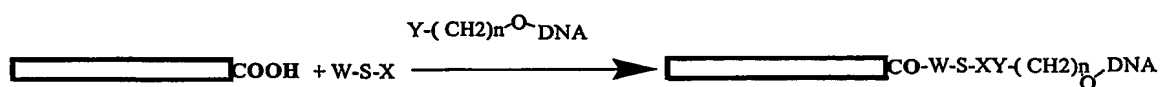


Scheme 1

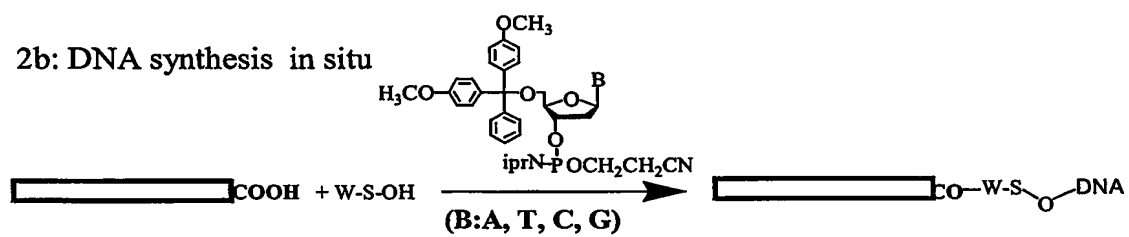
FIGURE 1

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2a: Chemical reaction with presynthesised DNA



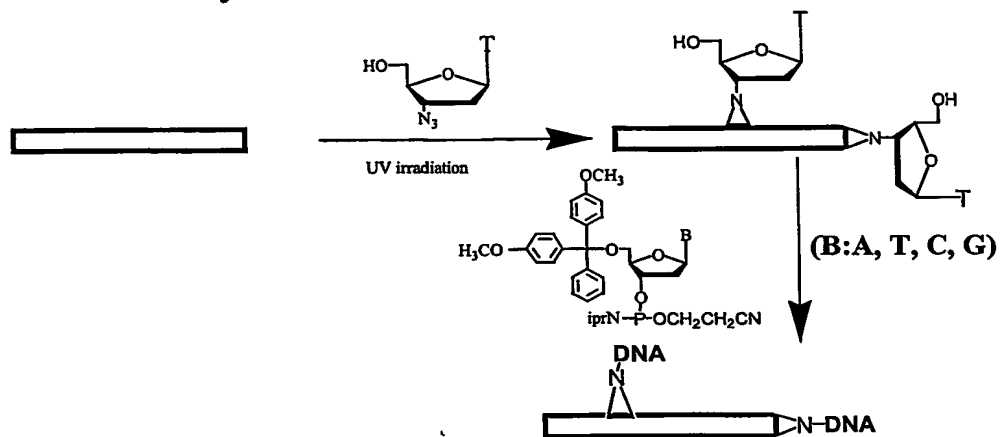
2b: DNA synthesis in situ



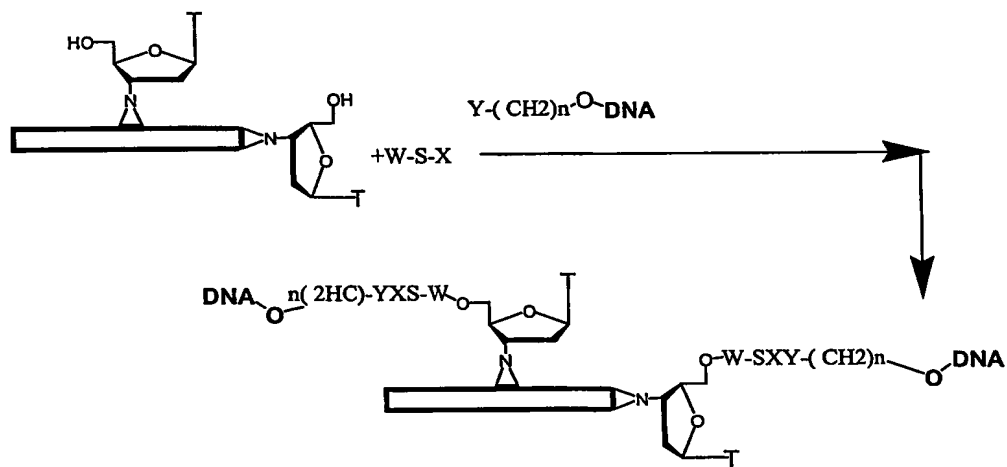
Scheme 2

FIGURE 2

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3a: DNA synthesis *in situ*

3b: Chemical reaction with presynthesised DNA

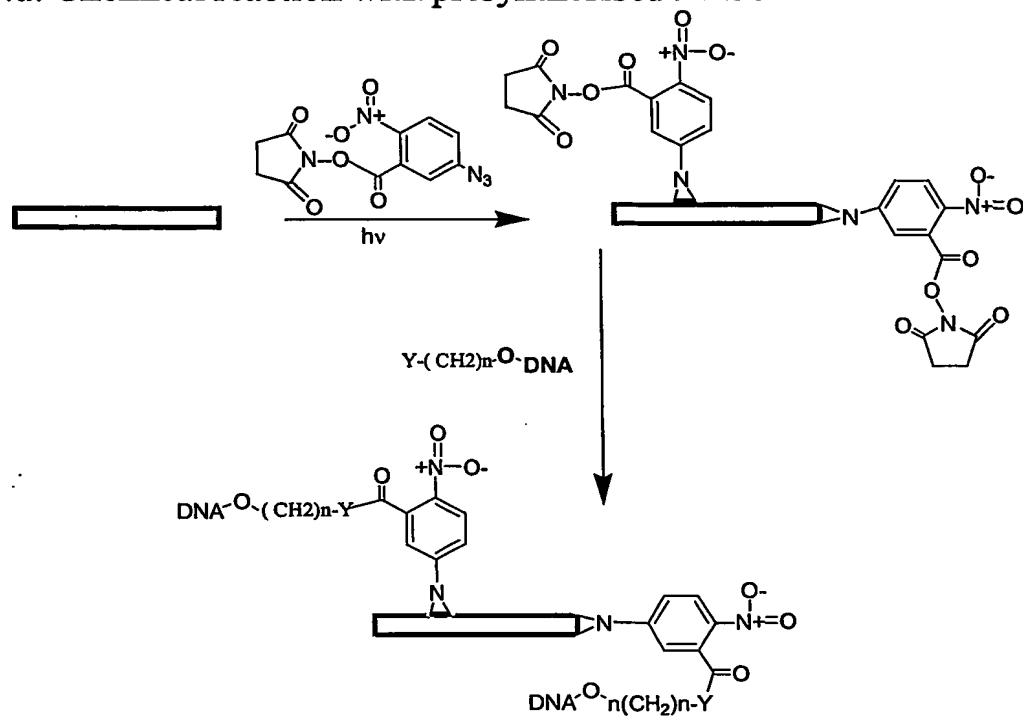


Scheme 3

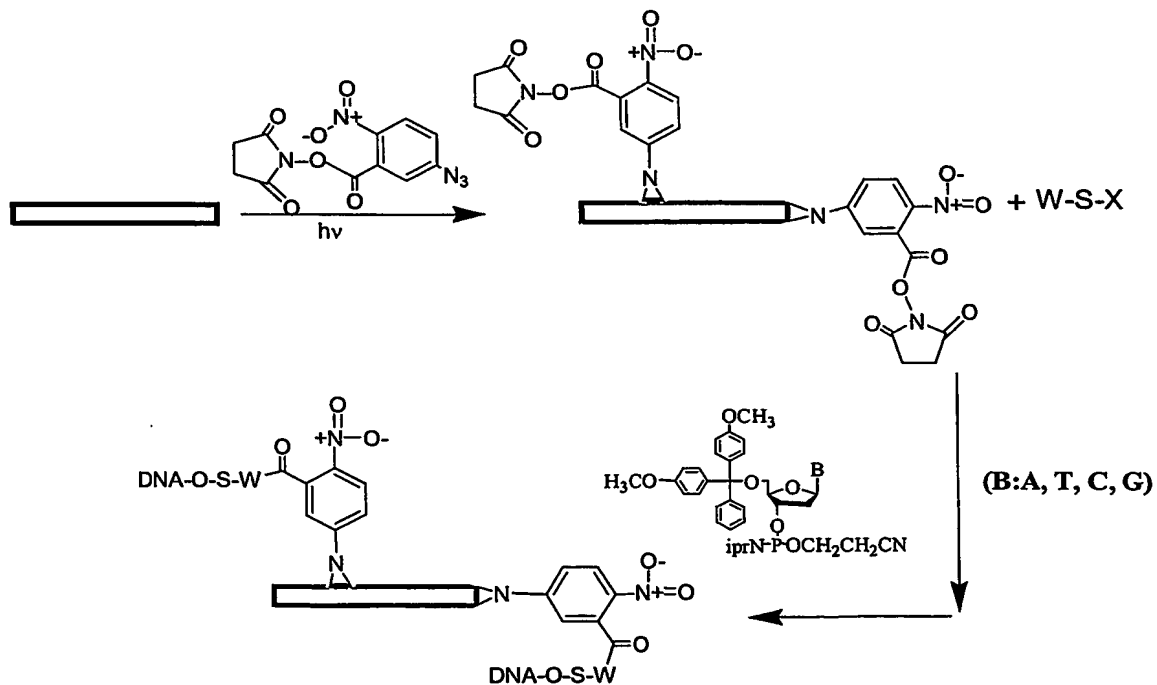
FIGURE 3

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4a: Chemical reaction with presynthesised DNA



4b: In situ synthesis of DNA



Scheme 4

FIGURE 4

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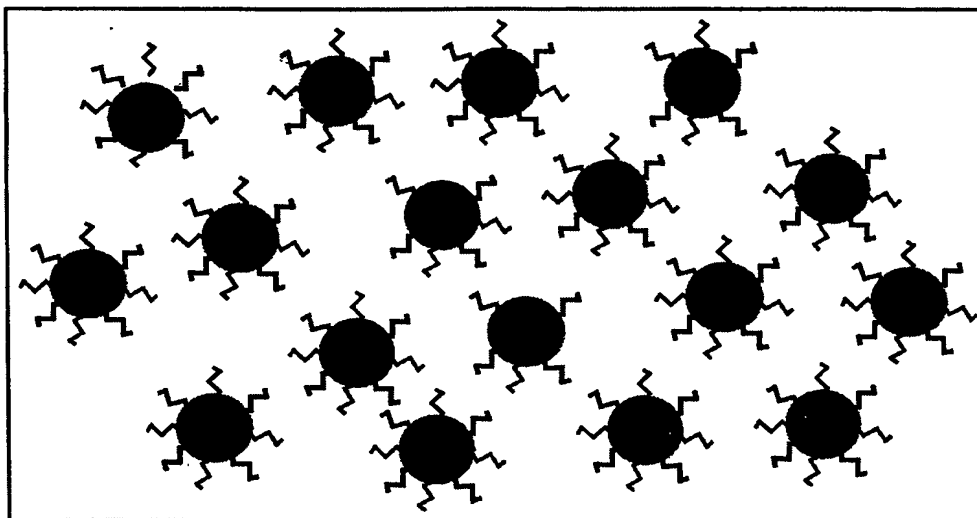
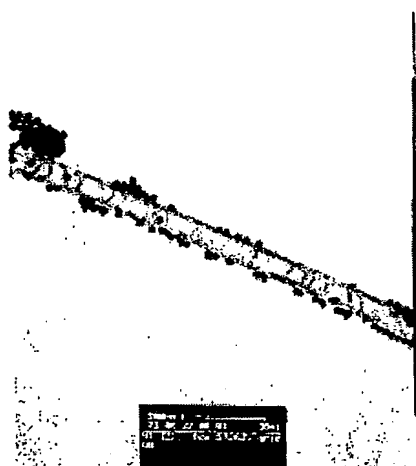
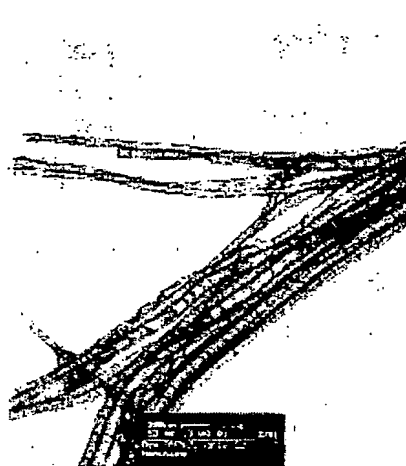


FIGURE 5

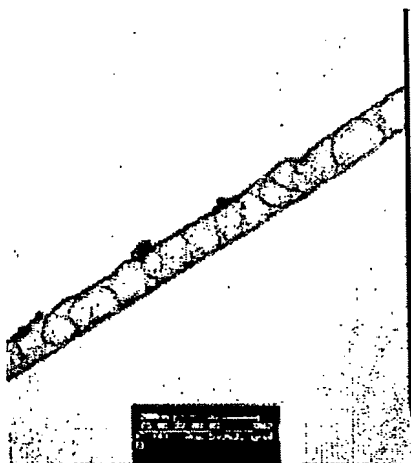
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(a)



(b)



(c)

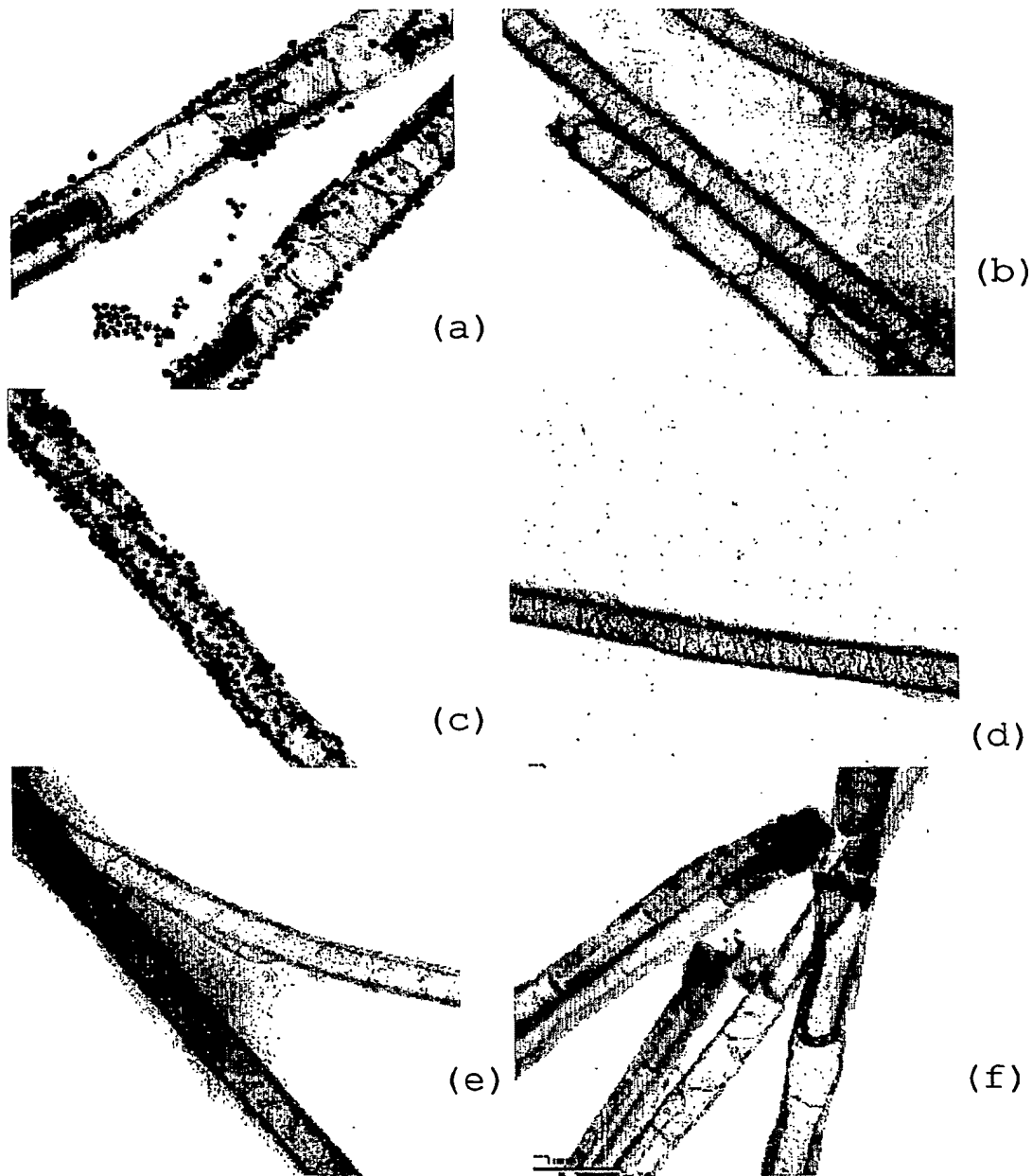


(d)

FIGURE 7

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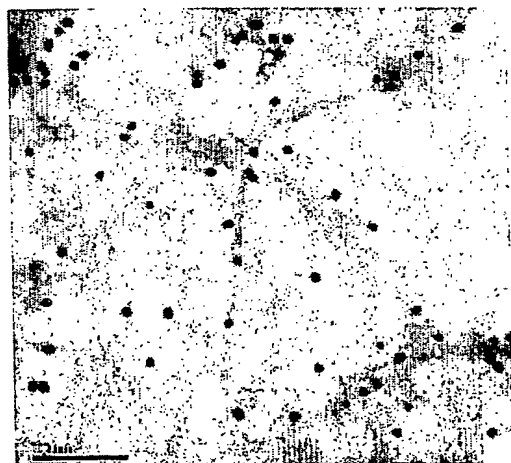
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FIGURE 8

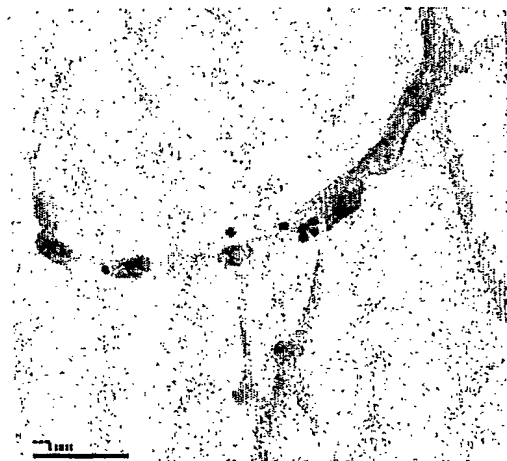
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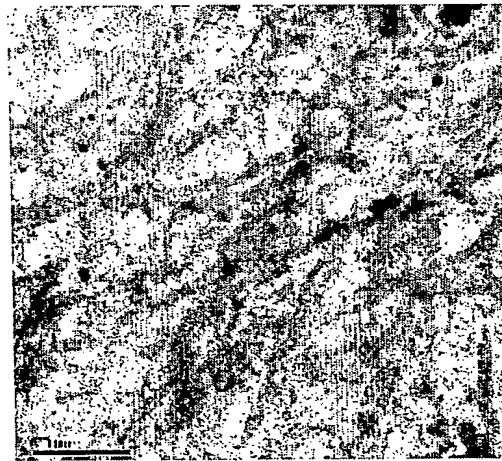
(a)



(b)



(c)

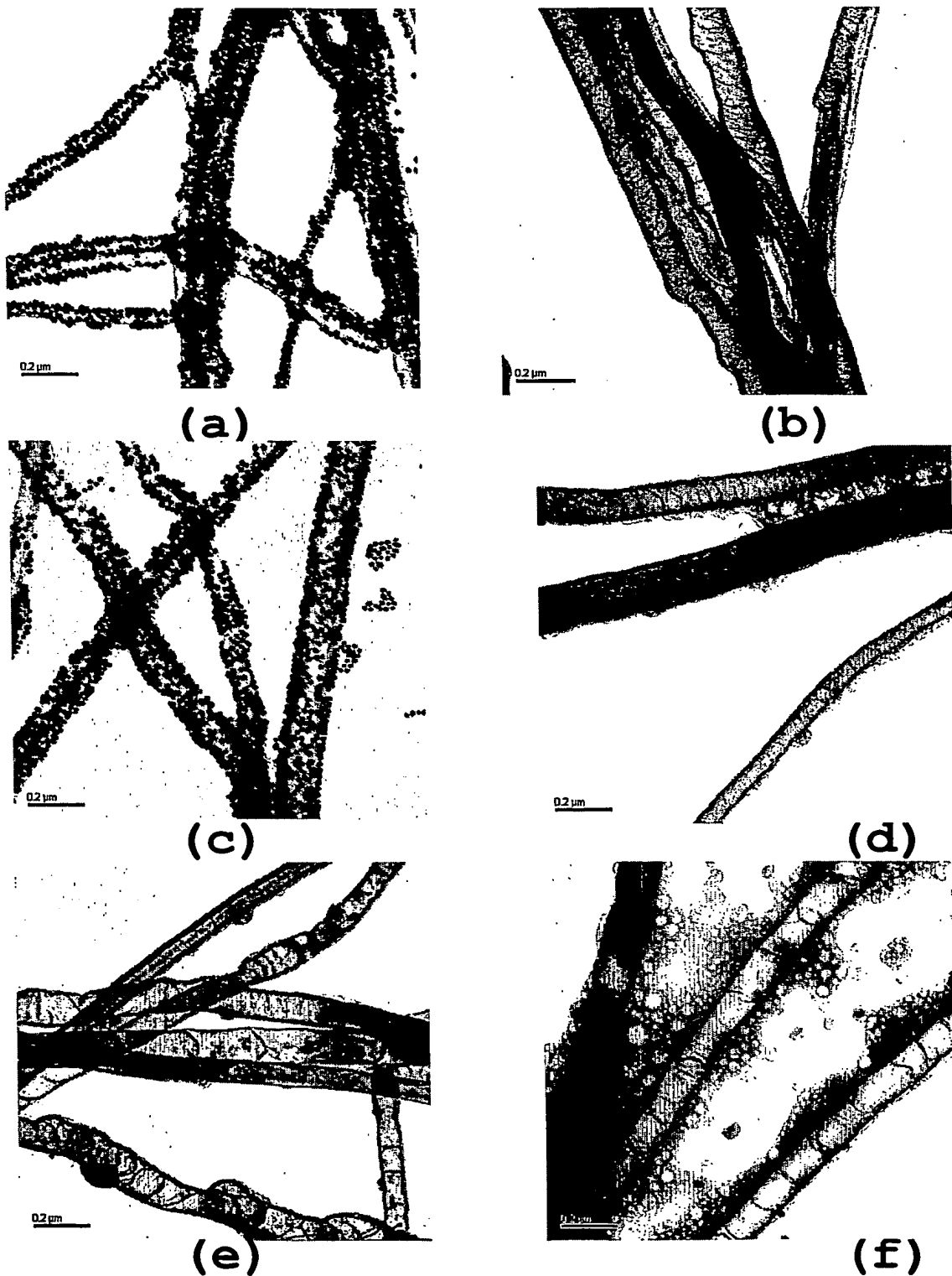


(d)

FIGURE 9

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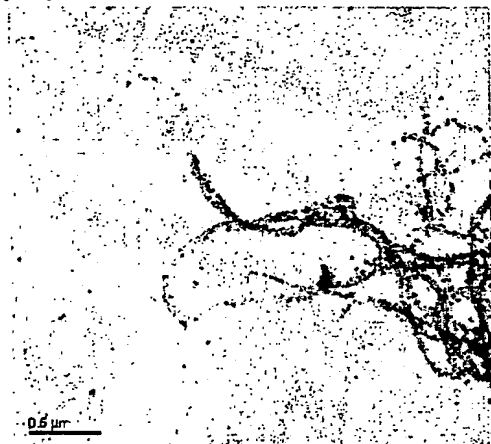


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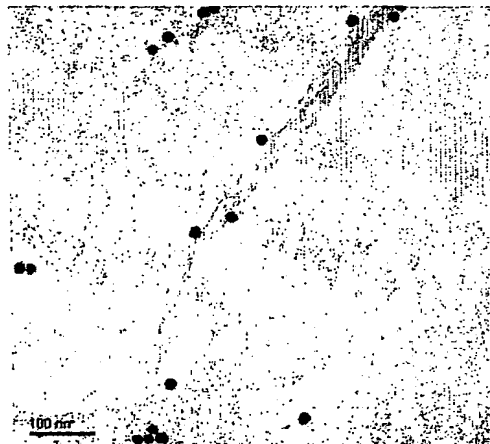
FIGURE 10

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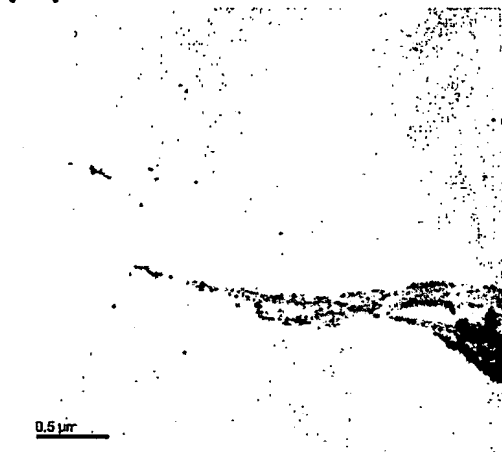
(a)



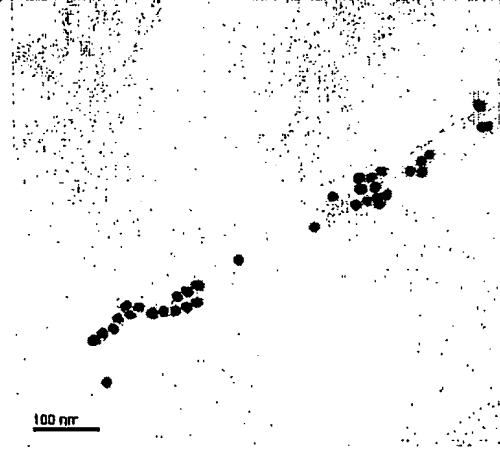
(b)



(c)



(d)



(e)



(f)

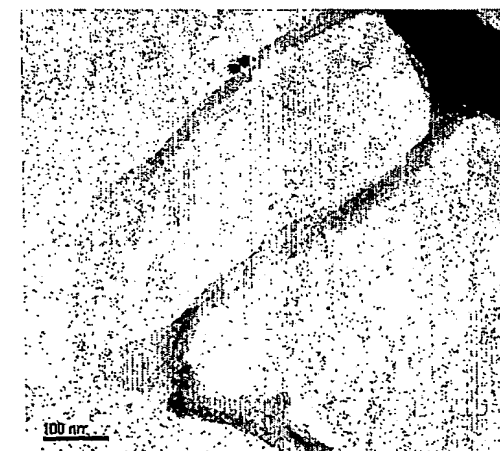
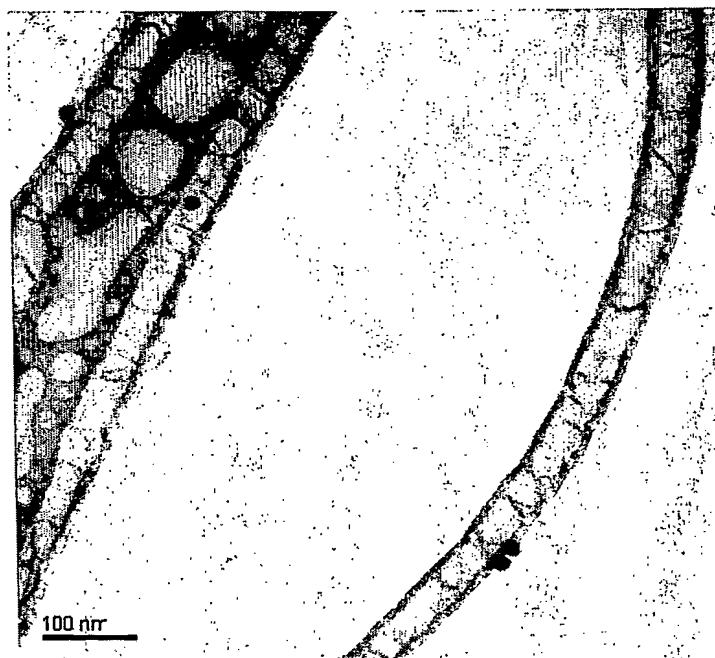


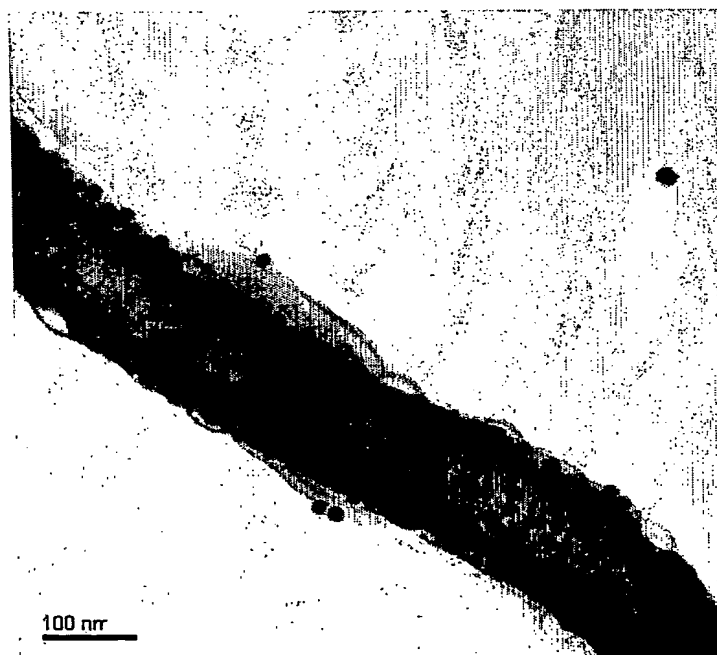
FIGURE 11

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(a)



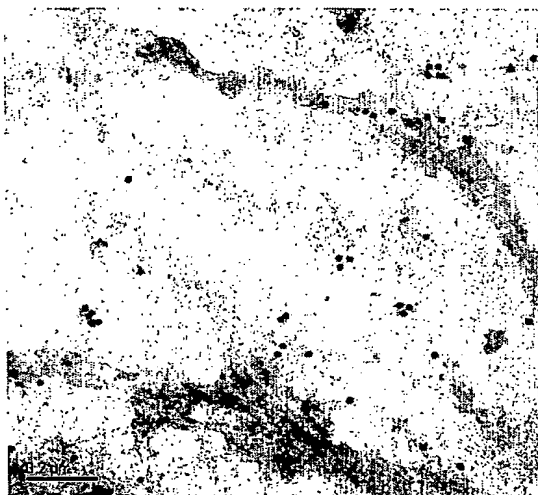
(b)

FIGURE 12

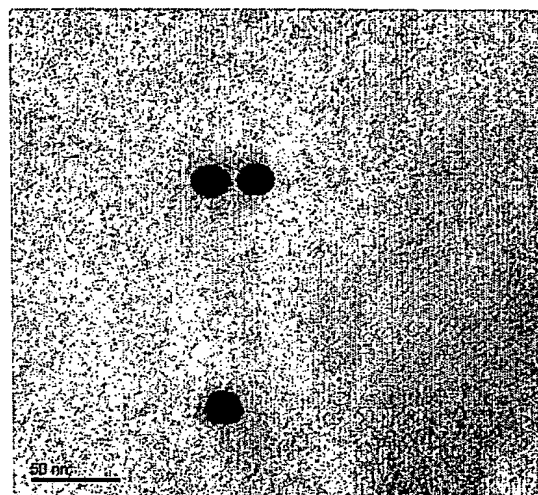
BEST AVAILABLE COPY

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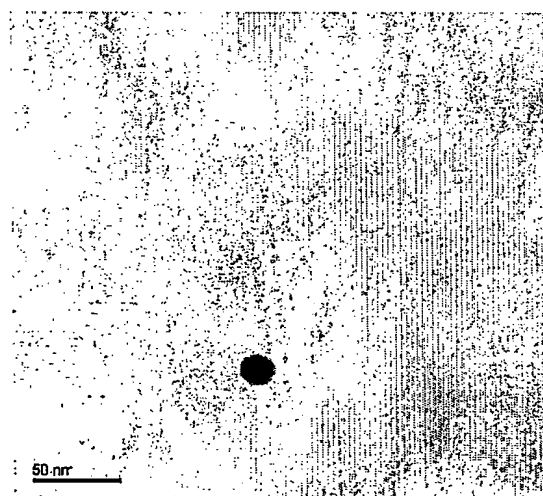
(a)



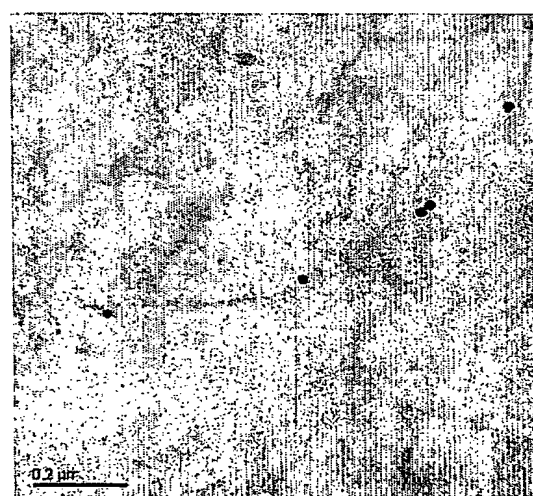
(b)



(c)



(d)



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FIGURE 13

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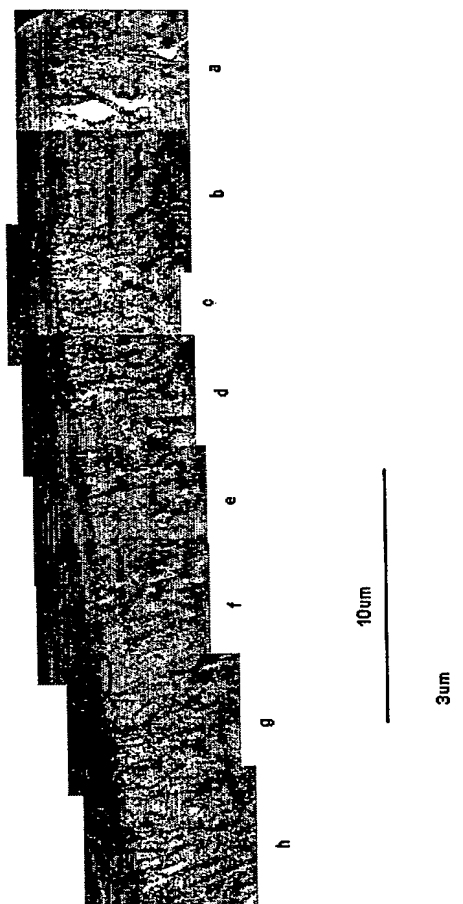
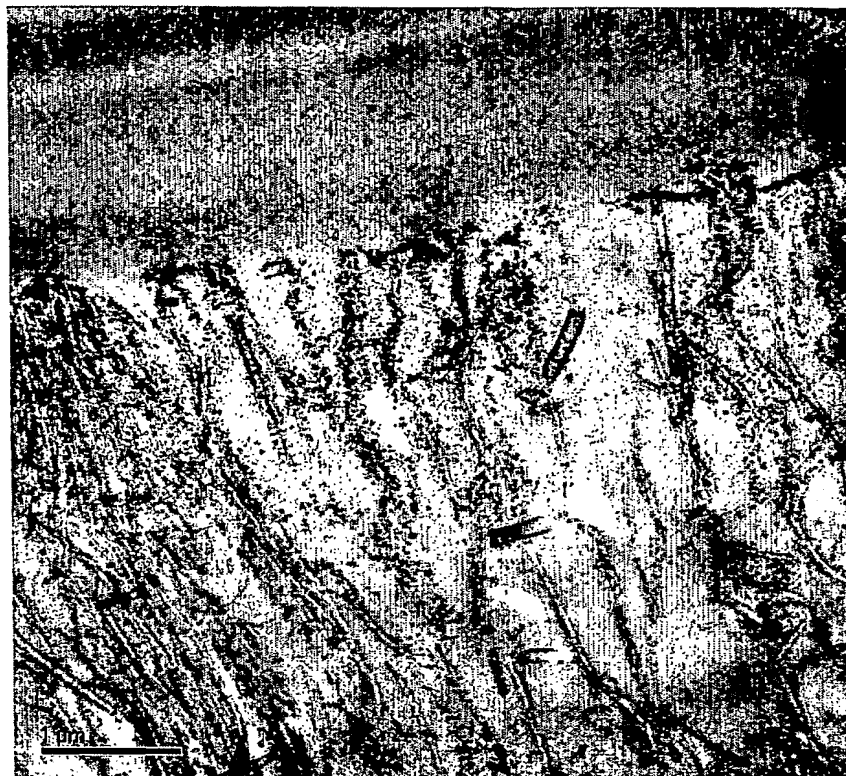


FIGURE 14A

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FIGURE 14B

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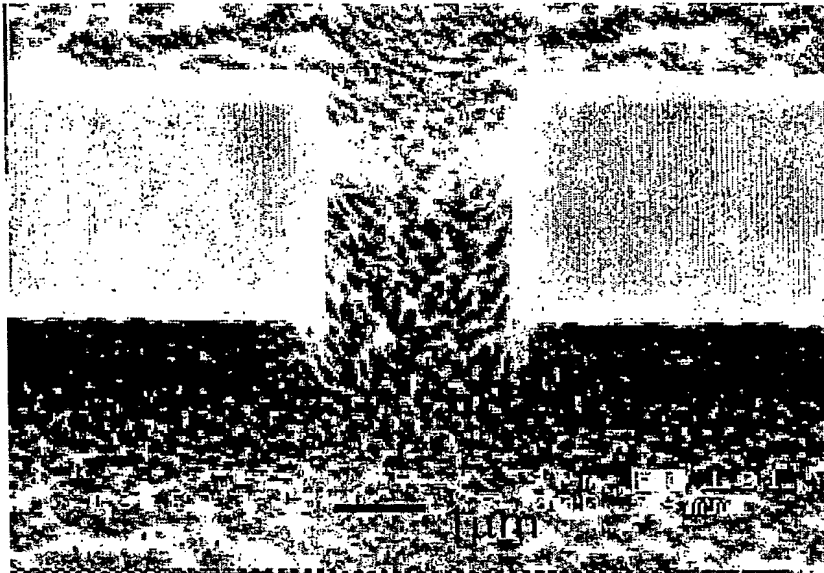
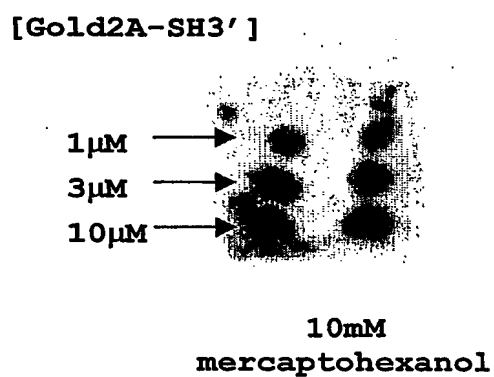
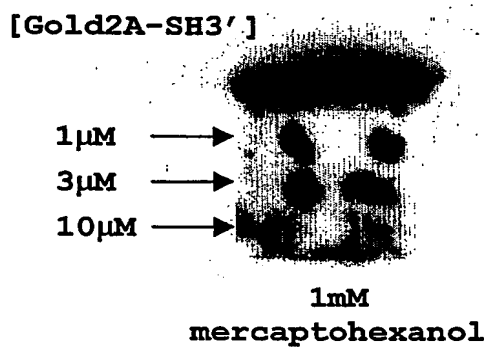


FIGURE 15

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BEST AVAILABLE COPY

FIGURE 16A

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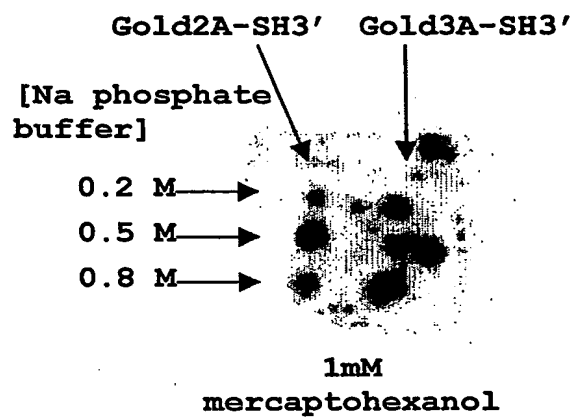


FIGURE 16B

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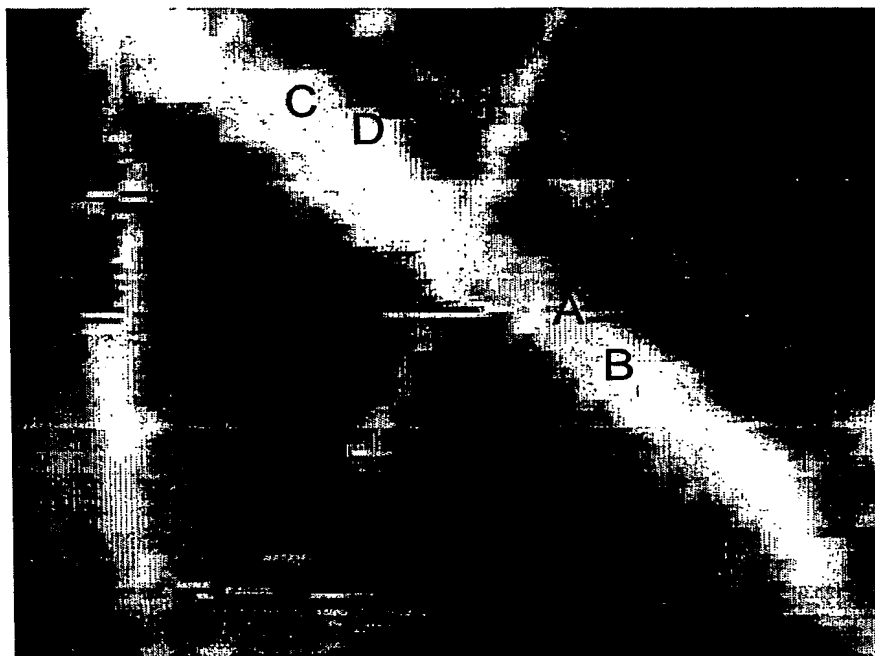
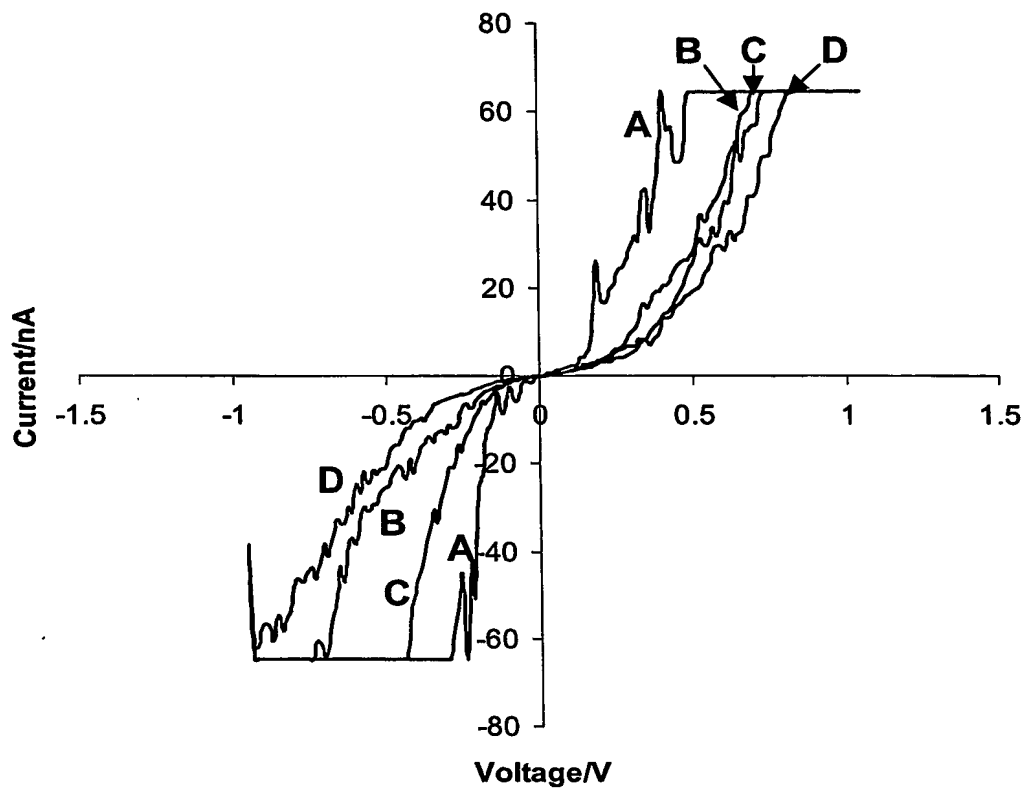


FIGURE 17A

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**FIGURE 17B**

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FIGURE 17C

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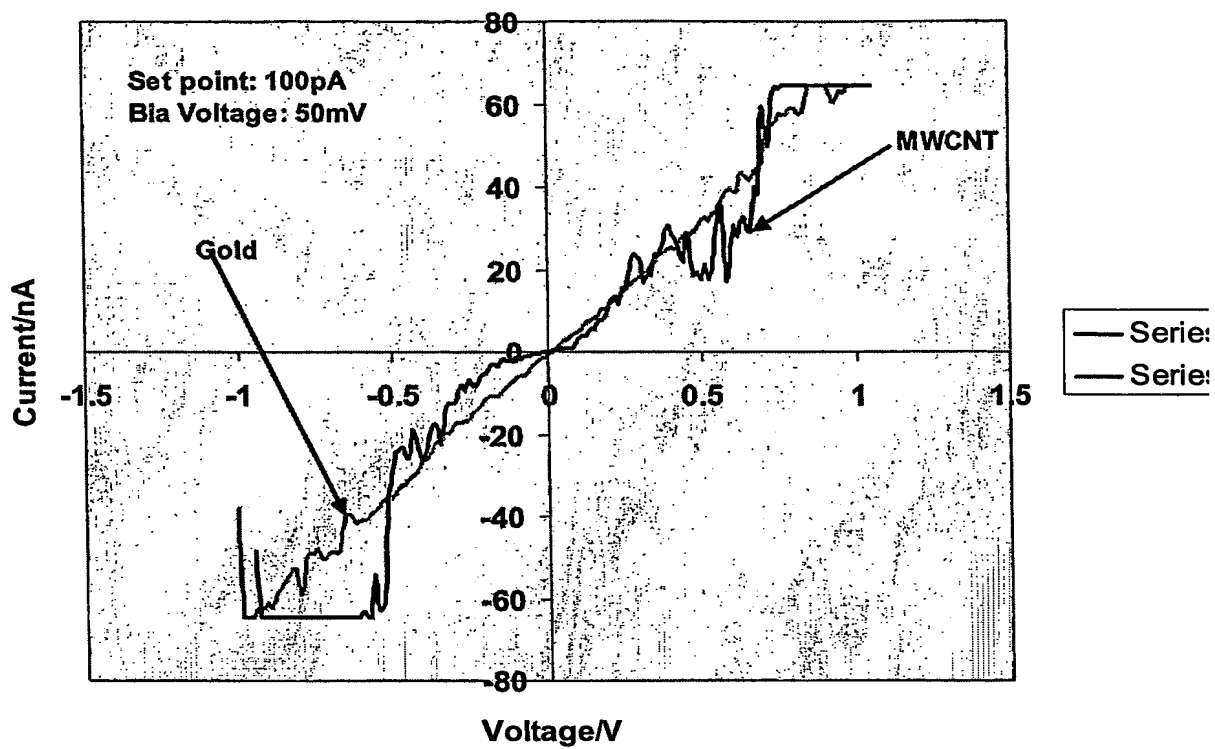
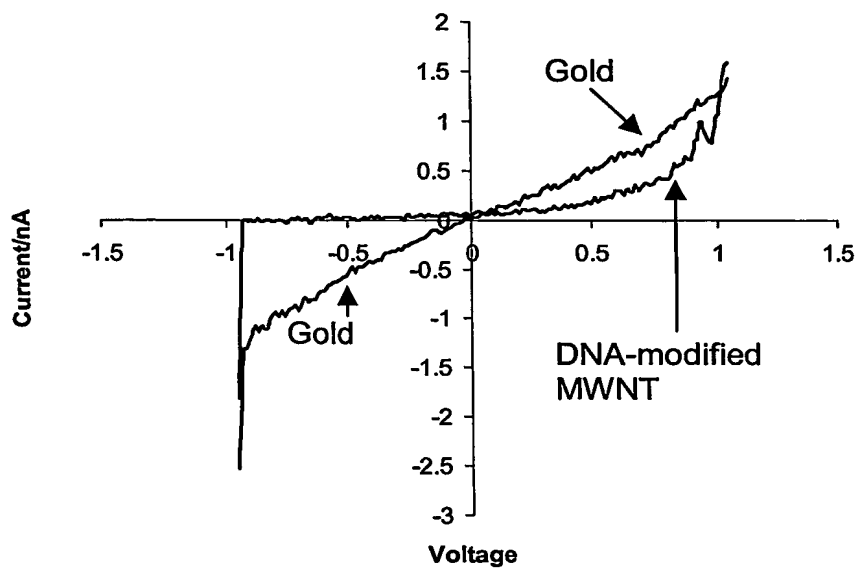
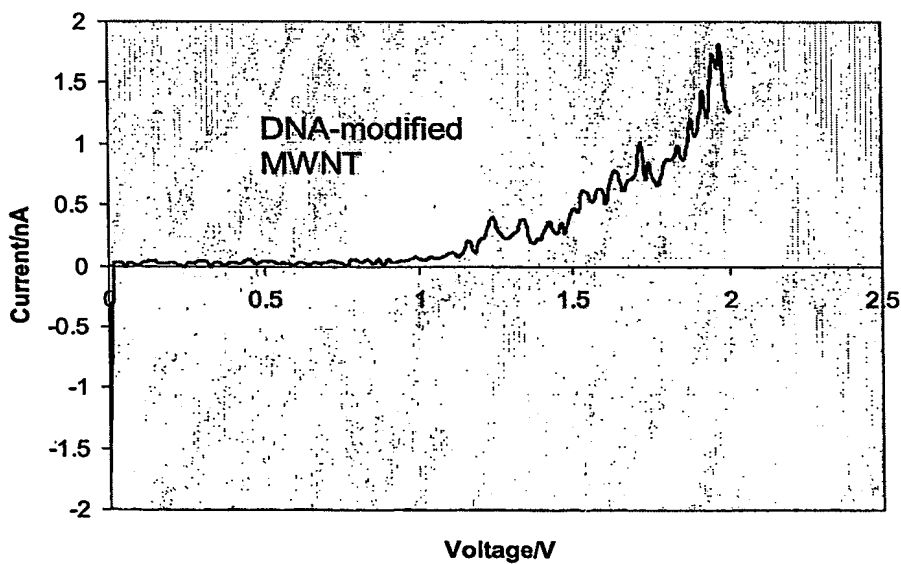


FIGURE 17D

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Voltage range from -1V to 1V



Voltage range from 0-2V

FIGURE 18

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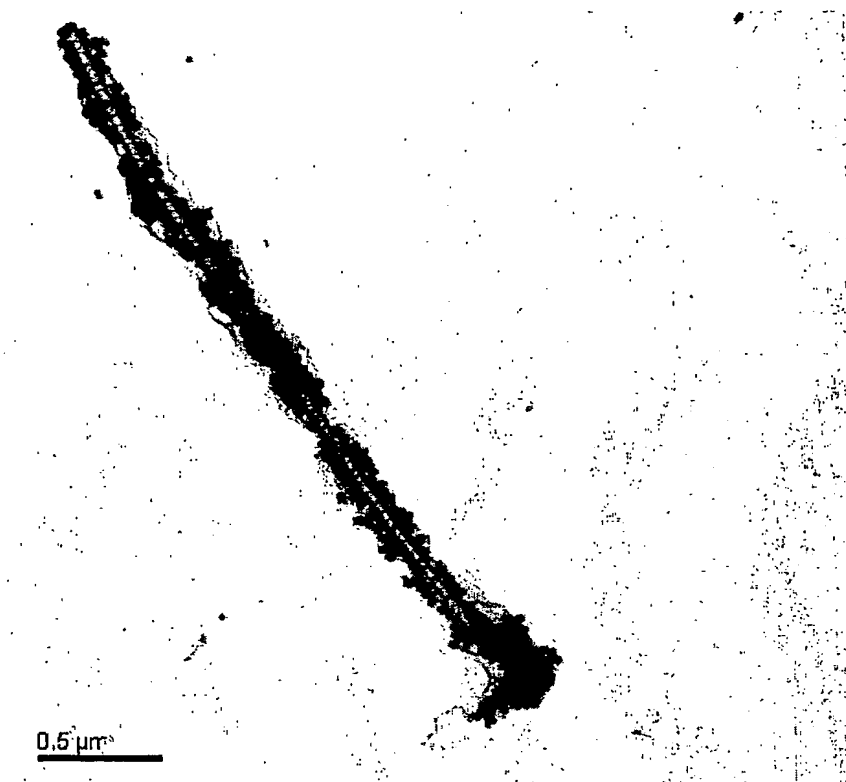


FIGURE 19A

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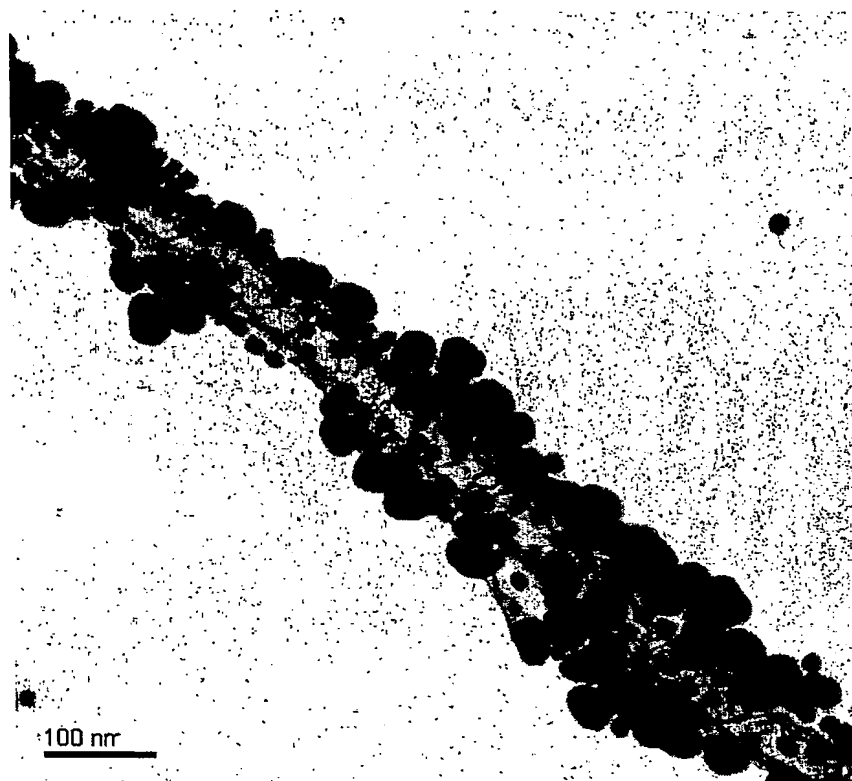


FIGURE 19B

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FIGURE 19C

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FIGURE 20